

REMARKS

The Final Office Action of October 28, 2003 has been considered by the Applicants, as well as the Advisor Action dated March 10, 2004. In accordance with the filing of the accompanying RCE and this Preliminary Amendment, withdrawal of the rejections and issuance of a Notice of Allowance is requested.

The Examiner has objected to Claim 26 as containing an improper dependent form. Claim 26 has been clarified to depend from claim 10. Withdrawal of the objection is requested.

Claims 10-13, 15-17, 22, 24, and 26-27 were previously rejected under 35 U.S.C. § 102(b) as being anticipated by Hoffman (U.S. Patent No. 3,956,045). Applicants traverse the rejection.

According to the Examiner, Hoffman teaches an apparatus and method for bonding different film layers, comprising a support member having a flat surface to receive and support a region of a flexible film, a heatable member having a smooth heatable flat surface for compressing and heating a portion of the seam region, wherein the heatable flat surface comprises a low surface energy or anti-adhesive material, a fluorocarbon layer or a polymer layer; wherein the heatable member could be a plastic strip, aligned for centering over the seam.

However, Hoffman relates to the bonding of polyester films such as those used in the manufacture of food packaging or bags relating thereto. Pressure is applied to compress the films against one another and then heated. This reportedly produces a strong bond. The claimed invention concerns the creation of a smooth seam region in a flexible imaging member belt. Heat is first applied followed by pressure to produce a smooth seam region devoid of protrusions. Hence, Hoffman relates to different products, apparatuses and processes for forming the same, than the claimed invention.

Furthermore, the Examiner has not shown where Hoffman discloses a surface having a very narrow width, for example a width of from about 6 mm to about 30 mm, such as the presently claimed surface (see claims 11 and 25). Such intimate line contact of the heatable member and the seam substantially instantaneously elevate the temperature of only a small localized region of the imaging layer in the seam region of the imaging member belt containing

thermoplastic polymer. Pressure is then applied in the narrow area to produce a smooth seam without protrusions. Because Hoffman does not disclose many elements of the rejected claims, it cannot be said to be anticipatory, and/or obvious of the present claims. Accordingly, withdrawal of the rejections is appropriate.

The Examiner has also previously rejected claims 10-13, 22-24, and 26 under 35 U.S.C. § 103(a) as being unpatentable over Onishi in view of Schwarzkopf. The rejection is traversed.

According to the Examiner, Onishi discloses an ultrasonic welding apparatus comprising a support member with a flat surface for supporting the workpieces, a heatable member compressing the seam portion of the workpieces, wherein the heatable member is a metal rotatable compression wheel, has a heatable flat smooth surface to heat a portion of the workpieces on the flat surface of the support means, and a heatable plastic strip. The Examiner further states that while Onishi fails to disclose that the support member comprises a non-adhesive material, Schwarzkopf discloses an apparatus for heat sealing two superimposed plied, comprising a heatable compress member, a support member with a flat surface made of Teflon, and a silicon rubber pad, to provide a removable backing for the support member. The Examiner concludes by stating that it would be obvious to one of ordinary skill in the art at the time of invention to modify Onishi by providing a Teflon layer on the support member as aught by Schwarzkopf. Applicants disagree.

Even if the Examiner were correct that the proposed combination was obvious, the combination would not result in the apparatus of the claimed invention. The presser roll of Onishi is provided with an inverted "U-shaped" recess on the contact surface facing the work surface. This recess makes alignment critical to produce uniform pressure around the entire overlapped thick portion of the material to be joined. Furthermore, Onishi is directed to the joinder of the two workpieces overlapped one above the other at one edge portion of each by being folded back and the other sheets added, as opposed to the nature of the flexible imaging member belt of the claimed invention.

Similarly, Schwarzkopf relates to an apparatus for making heat seals with a weakened tear line. Such a tear line process is in opposition to the claimed invention. Schwarzkopf is also not directed to the application of heat and pressure in a narrow region to produce a smooth seam. There are features not desired by

the claimed invention. Accordingly, Applicants request withdrawal of the 35 U.S.C. § 103(a) rejections over Onishi in view of Schwarzkopf.

Claims 10-13, 15-22, and 25 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Heyse in view of Hoffman. Applicants traverse.

The Examiner states that Heyse discloses an apparatus for continuous welding or sealing of seams of plastic films. The Examiner further states that Heyse fails to disclose that the support member includes a flat support surface and the heatable flat surface comprises an adhesive material, but Hoffman teaches the flat surface and heatable member. Specifically, with regard to claim 21, the Examiner previously stated, "...the size of the strip will depend on the thickness of the sheet material, the heating duration, the amount of electric applied that one of ordinary skill in the art could modify the size of the heating strip to provide a sufficient heating to the material" Applicants disagree.

The Examiner has explicitly stated that the size of the strip will depend on a number of variables. Moreover, each of those variables is interdependent. Accordingly, the size of the strip is not a matter of routine optimization, based on only one known factor. Rather, it is the result of experimentation, varying the different variables in relation to each other to achieve the desired size. Achieving the desired size would only be the result of undue experimentation, not routine optimization. Such optimization could only be called routine and obvious through the use of prohibited hindsight, using the present invention as a roadmap.

The Examiner has shown no teaching or suggestion within either of Heyse or Hoffman that would lead one of ordinary skill in the art to make the proposed combination. Moreover, the Examiner has provided no motivation within either of Heyse or Hoffman that would lead one of skill in the art to make the combination and then impart on the path of experimentation to achieve the presently claimed surface size. Because such combination and modification could only be the result of undue experimentation, the claims are not obvious over Heyse in view of Hoffman. Accordingly, withdrawal of the rejections is requested.

Applicants submit the present application is in condition for allowance. Entry of the above clarifications, withdrawal of the objections and rejections, and issuance of a Notice of Allowance is requested.

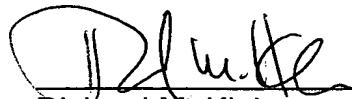
In the event the Examiner considers personal contact advantageous to the

disposition of this case, he/she is hereby authorized to call Richard M. Klein, at telephone number 216-861-5582, Cleveland, OH.

It is believed that no fee is due in conjunction with this response. If, however, it is determined that fees are due, authorization is hereby given for deduction of those fees from Deposit Account No. 24-0037.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

A handwritten signature in black ink, appearing to read "R. Klein", is written over a horizontal line.

Richard M. Klein

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